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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,466	06/29/2001	Ajit V. Sathe	219-10241X00	5280

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EXAMINER

PATEL, ISHWARBHAI B

ART UNIT PAPER NUMBER

2827

DATE MAILED: 06/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application No.</b> 09/893,466	<b>Applicant(s)</b> SATHE, AJIT V.	
	<b>Examiner</b> Ishwar (I. B.) Patel	<b>Art Unit</b> 2827	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
- (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
  - (b) ☐ they raise the issue of new matter (see Note below);
  - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_

Claim(s) objected to: \_\_\_\_\_

Claim(s) rejected: \_\_\_\_\_

Claim(s) withdrawn from consideration: \_\_\_\_\_

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

Continuation of 5. does NOT place the application in condition for allowance because:

(a) Applicant's Argument: Lin not disclosing thin core / coreless substrate:

Lin discloses a substrate 14 and further discloses the suitable substrate can be of ceramic or PTFE (Teflon), or Polyamide tape, or of FR4, Lin column 5, line 55-60. Polyamide, Teflon and other polymer tapes are well known in the interconnecting packaging industry and thin substrate suitable for the specific requirement can be used. Even, the circuit board of Lin, if used with tape having metal pad on one side, will be considered as coreless substrate, used as "TAB", tape automated bonding.

(b) Applicant's Argument: Secondary reference of Ho, US Patent No. 6,287,890, not disclosing thin film:

Ho discloses an interconnect substrate 12 with which the chip is connected, and the dielectric film, either film laminated or a liquid film deposited, is of the order of 10 to 50 micrometer, which is a thin film, Ho, column 7, line 21-34, figure 1. Further, how the interconnect substrate is made is irrelevant as the chip is mounted on the interconnect substrate 12 and not on the metal substrate 14.

(c) Applicant's Argument: Related art of Ho, US Patent No. 6, 291,268, not disclosing thin film:

As explained above, the chip is mounted on the interconnect substrate, 12, wherein the dielectric layer thickness is between about 10 to 40 micrometer, see Ho, column 4, line 44-56.

(d) Few other prior arts disclosing the thin tapes used in the interconnecting packaging industry are added here for further reference only, not as prior arts.

(1) Hashimoto discloses a tape carrier, with a substrate using polyimide film of thickness 25 micrometer to 125 micrometer and further discloses that polyester film, glass epoxy film, polyamide film or a similar organic film may also be used, see Hashimoto column 6, line 49-55.

(2) Fjelstad discloses a thin polymer layer of polyamide, polyetherimide or polyimide with a thickness of 50 micron; see Fjelstad, column 6, line 9-20.